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Book Reviews and End Matter

BOOK REVIEWS

Beads and Beadwork of West and Central Africa. **Margret Carey**. *Shire Ethnography* No. 21, Shire Publications, Princes Risborough, Buckinghamshire, U.K., 1991. 56 pp., 45 figs., 1 map, index. £3.95.

A companion to Ms Carey's "Beads and Beadwork of East and South Africa" (*Shire Ethnography* No. 3), this is one of several books in a series "intended for students of ethnography and the interested layman." As such, this volume provides a wide range of bead and bead-related information pertaining to an extremely large area of the African continent. An introduction to the various bead types utilized in the study area is followed by a discussion of the beads and beadwork of the following areas: Senegal, The Sahel and Ghana; Nigeria; The Bight of Biafra to Gabon; and Zaire and Angola. One of the keys to success in producing a general work such as this is to treat all of the sub-topics in a manner that allows each one to be proportionally representative within the larger context of the general subject. Given the wide diversity of information offered in this book, the author has succeeded in presenting certain basic facts in a format that is relatively easy to follow.

The text is fluid, the explanations appear to be correct, and most of the essential information regarding the topic of beads and beadwork in this part of the world is included. The photos, even though all but the cover are in black and white, give valuable support to the text, and attest to the talents of African artisans; e.g., the "belts" from Sierra Leone, Republic of the Congo, Gabon, Zaire and Cameroon. Also of interest are the photos of royal stools of chiseled wood covered with beads from Cameroon and the well-known beaded calabashes that, in former times, contained the remains of the skulls of deceased kings.

In her discussion of beads and their uses in Cameroon, Ms Carey has unfortunately forgotten to mention the very important transparent drawn glass beads with longitudinal white stripes which, in Cameroon, are among the most precious of beads. They are worn mostly by kings and royalty in necklaces of one or several strands, alternating with large "chevron" beads. These assemblages are also sometimes used by important high-ranking persons other than royalty during certain celebrations and gatherings. The value of these time-honored drawn-glass beads is extremely high (Harter 1981).

Other troublesome gaps in this book concern the countries of Mali and Mauritania which are hardly mentioned at all. In particular, and despite their centuries-old importance in Mauritanian customs, beads of amazonite (a greenish variety of feldspar) have been completely overlooked in the section concerning beadmaking in West Africa. This is an extremely significant subject that has been well researched and documented (Mauny 1956), and deserves mention even in a general work such as this. Amazonite beads have been held in very high regard since prehistoric times, and continue to be avidly sought to this day by certain populations inhabiting the Sahara from Mauritania to Chad.

Concerning information about the fabrication of glass beads in Nigeria, Ghana and Mauritania, the author's presentation is clear and explicit for those readers who are being exposed to African techniques for the first time. The photo of a terra-cotta mold for making beads from Ghana is very informative. Nevertheless, it is important to note that the fabrication of beads using inexpensive crushed glass beads from Europe is also practiced to a great extent in Ivory Coast as well. In this part of West Africa, women who are ill wear these African-made beads around the ankles as a way to cure their maladies.

Also concerning Mauritania, Ms Carey describes glass beads made in and around the towns of Kiffa and Oualata as resembling millefiori beads from Venice. It may be true that certain styles resemble the millefiori motif, but an even more significant number

of the beads, especially those which are triangular in shape, have their own unique styles and motifs. The author also states that Kiffa and Oualata beads have a central core made of "white glass powder paste" (page 16). This is not the only technique used: a large number of beads are fabricated simply by using an inexpensive monochrome European glass bead as a core onto which differently colored powdered-glass pastes are applied to form the outer layer of decoration. A simple piece of bottle glass, ground to the proper form and polished, is also sometimes used as a core.

Another omission worth mentioning concerns the incomparable beads made from the wood of "faux-ebene" trees that grow along and near the Senegal River. They are inlaid with fine silver threads in motifs that protect against the evil eye and are worn principally in Mauritania. Also, beads made of scented paste, popular throughout Africa, especially in Senegal, Mali, Mauritania and Togo, represent a very important subject that is not mentioned either.

In the description of Prosser-molded or "tile" beads on page 9, the author writes that "most of these beads come from Czechoslovakia." It is important to note the Bapterosses Company of France was, from the late 1860s to the 1970s, among the principal suppliers of this type of bead to West and Central Africa. In particular, toward the end of the 19th century, Bapterosses beads were in great demand in the Congo (Fourneau 1954). These same beads were appreciated throughout Africa for their quality, form and color for many years (Bessone 1987).

Although the above-mentioned omissions, among others, may be deemed important enough to have been included in this book, it should be noted that any work with such an enormous scope might be considered to have gaps in the information it provides.

Beads and Beadwork of West and Central Africa is interesting because of the author's well-chosen research sources, as well as its inexpensive price, especially for "the interested layman" who is being exposed to the subject for the first time. However, for many, including scholars and researchers, the book risks being a point of frustration because of its weak bibliography that significantly reduces the potential value of the general information contained within. The omission of specific reference information concerning the "useful articles and monographs" on page 55 is extremely limiting to those who read her book and desire to further their knowledge of this most interesting subject. Although it is stated that "many interesting articles can be found," there is no way to follow up on this fact, leaving the reader hungering for more but with no further hope to satisfy the hunger.

Finally, it should be noted that IFAN, mentioned in the book as the *Institut Français d'Afrique Noire*, was renamed the *Institut Fondamental d'Afrique Noire* after Senegal's independence in 1958. This may not appear significant to those who are unaware of the institute and its overall mission, but to those who are, this incorrect name will surely be the subject of some concern.

REFERENCES CITED

Bessone, J.
1987 Verroterie. In *Panorama du Centenaire*, pp. 177-181. Compagnie Francaise de l'Afrique occidentale, Paris.

Fourneau, J.
1954 Les verroteries de l'epoque coloniale en Afrique centrale. *Notes Africaines* 64:12.

Harter, P.
1981 Les perles de verre au Cameroun. *Arts d'Afrique noire* 40:6-22.

Mauny, R.
1956 Perles ouest Africaines en amazonite. *Bulletin de l'IFAN* 18(1-2):140-147.

Marie-José Opper
Howard Opper
1023 Cross Drive
Alexandria, VA 22314

Shell Bead and Ornament Exchange Networks Between California and the Western Great Basin.

James A. Bennyhoff and Richard E. Hughes. *Anthropological Papers of the American Museum of Natural History*, Vol. 64, Part 2, New

York, 1987. 96 pp., 14 figs., 13 tables. $10.50 (paper).

For archaeologists in California and the Great Basin, the publication of Bennyhoff and Hughes' *Shell Bead and Ornament Exchange Networks Between California and the Western Great Basin* was anxiously awaited and long overdue. While the discussion of shell beads and ornaments in the western Great Basin is the ultimate goal of the text, the primary use of the publication will be the typology and classification procedures for identifying *Olivella* shell beads and shell ornaments. Indeed, Chapter 1, which comprises the bulk of the publication (63 pages), consists of a synopsis of shell bead and ornament typologies for California and the Great Basin as developed by the senior author over the past 30 years. The remaining discussion of shell exchange is 15 pages long and is followed by eight pages of an appendix providing provenience information on the California and Great Basin shell beads discussed in the text.

The original purpose of the monograph was to report on the shell beads and ornaments from Gatecliff Shelter, Nevada, one site within the larger Monitor Valley research project directed by David H. Thomas. In the process of comparing the bead and ornament data from Gatecliff with other assemblages in the Great Basin, Bennyhoff and Hughes realized that the original standard for comparing shell beads and ornaments (Bennyhoff and Heizer 1958) was inadequate. A significant amount of new information had accumulated during the past two decades regarding the distribution and dating of shell assemblages. Their goal, consequently, was to "quantify and objectify the classification process in the hope that this would encourage standardization of reporting" (p. 83).

The beginning of Chapter 1 provides a brief review and critique of the two major *Olivella*-shell bead typologies previously used by researchers in California prehistory: Lillard, Heizer and Fenenga (1939), later revised by Gifford (1947) and Beardsley (1954). Rather than augmenting one of the previous typologies, Bennyhoff and Hughes chose to create a new one that could be expanded more easily. Table 1 provides a useful comparison of Bennyhoff and Hughes' classification with the earlier typologies.

As Bennyhoff and Hughes readily admit, their classification is of the "splitting" not "lumping" variety. Beads are classified based on their form. Nonetheless, the authors are attempting to provide basic metrics and description-of-form variations to identify "cultural associations through time and space" (p. 86). Beads are measured according to a standard orientation of the *Olivella* shell, spire up and canal down. Growth lines are always vertical so that length and width measurements are not confused. A diagram illustrates the parts of the shell and examples of the location of certain bead forms taken from different parts of the shell. The diagram and accompanying glossary are helpful for the novice researcher.

The synopsis provides standard measurements in millimeters for bead diameter, length, width, curvature, thickness, and perforation diameter, as appropriate to a particular form. The description of the Class frequently makes reference to the site or location within California for which the type is most clearly represented. No numbers are given, however, for how many of the beads from these sites were measured in developing the standard measurements, including the size range and mean perforation diameter. Presumably this information could be retrieved by checking the collections for the particular sites illustrated in the drawings for each type. The source and temporal significance of each Class and subclass is discussed. This is followed by a brief discussion of the Great Basin occurrences referenced to a table that indicates the site number(s) and estimated time period for that particular bead form. When the information is available, the authors indicate whether the beads were recovered from a burial or midden.

I have used this classification system for typing *Olivella* beads recovered from several sites throughout California, and have had few difficulties with the basic procedures for measuring and classifying bead types. The collections were all from loose associations within a midden, not from grave lots that had been radiocarbon dated or seriated. One bead form proved difficult to type, however, and it suggests some problems with the typology that need to be clarified through future studies.

The one difficulty I had in applying the classification was distinguishing between Class L and

M rectangular bead forms. As the artifacts were recovered from a midden and the measurements for the beads had a wide range, it was difficult to determine where the break should be in determining whether the beads were Thick Rectangles (L) or Thin Rectangles (M). To illustrate this problem, consider the measurements given for each form. The subclass L2 Small Thick Rectangle has a length range of 5.0-10.0 mm, a width of 4.0-9.0 mm, and a perforation diameter range of 1.5-2.5 mm. A mean of these is given, with no total number provided for how many beads were measured and from what collections to derive these size ranges. Although the form is labeled "Thick Rectangle," no measurement is given for the thickness of the bead. Subclass M1a Normal Sequin has measurements presented in a slightly different format. The size ranges from a length of 5.0 mm and a width of 4.0 mm up to a length of 12.0 mm and a width of 6.0 mm. The modal size is given rather than the mean. The perforation diameter is given as 1.0 mm "normally." It is not clear whether "normally" should be taken as a mean for some unknown number of specimens measured. Again, no measurements are given for the thickness of this "Thin Rectangle."

Why should anyone be interested in splitting hairs over this issue? It is important because the temporal significance for both subclasses is quite different. L2 is listed as occurring in the Early period (ca. 2000-200 B.C.) whereas M1a is a marker type for Phase 1 of the Late period (ca. A.D. 700-1500). So how does a researcher decide whether the bead forms at this site represent a multicomponent or single component occupation? Obviously, other lines of evidence, such as absolute dating of the deposit and features, need to be brought to bear on this problem before blindly accepting that the bead typology provides reliable temporal indicators of specific periods of occupation (Hartzell, in press). Clearly, more research is needed to identify the metric criteria that distinguish convergent forms if the classification is to have any meaningful temporal significance.

Several critical problems need to be addressed if this classification system is to be used by other researchers with a fair degree of confidence. First, standard reporting on the number of specimens used to develop the metric criteria needs to be presented. Second, the basis for selecting the metric criteria needs to be explicit and justified. For example, why is modal size, range, or mean used interchangeably when reporting measurements for different classes? Third, provenience information used to form the basis of the typology needs to be presented, along with a discussion of the reliability of the dating. A number of sites discussed by the authors were excavated many years ago. The dating and grave lot seriation information is not always available or well justified. Therefore, problems with dating need to be made explicit.

Finally, one must bear in mind that Bennyhoff and Hughes' interpretation that shell bead and ornament trade between the Great Basin and California was at a peak during the Early period (ca. 2000-200 B.C.) based on the total number of beads recovered from Great Basin sites to date must be taken with a great deal of caution. The total number of beads recovered and identified from any temporally significant context is quite small and statistically insignificant. The meaningfulness of the classification must be considered in light of the minimal information provided about the sample size and reliability of the dating on the bead types that form the basis of the overall classification.

Having pointed out the problems with the monograph, let me emphasize what I believe are the strengths of this publication. Bennyhoff and Hughes provide the first clear metric criteria for beginning to organize data on *Olivella*-shell beads. The typology is clear and easy to use. The principal data used to form the basis of the metric criteria distinguishing the types are given in the text by reference to site numbers. Thus, researchers can locate the primary data and conduct further studies to clarify problems such as those presented above for Class L and M rectangular bead forms. The concluding discussion of California Trade Centers draws on a number of sources of information and will undoubtedly form the basis for future studies and comparisons. Bennyhoff and Hughes, whether intentionally or not, have clearly pointed out the lines of research we will need to conduct to clarify many of the problems facing Californian and Great Basin researchers using shell beads and ornaments as temporal indicators.

REFERENCES CITED

Beardsley, Richard K.
1954 Temporal and Areal Relationships in Central California Archaeology. *University of California, Archaeological Survey Reports* 24, 25.

Bennyhoff, James A. and Robert F. Heizer
1958 Cross-Dating Great Basin Sites by Californian Shell Beads. *University of California, Berkeley, Archaeological Survey Reports* 42:60-92.

Gifford, Edward W.
1947 Californian Shell Artifacts. *University of California, Anthropological Records* 9(1):1-132.

Hartzell, Leslie L.
in press Archaeological Evidence for Stages of Manufacture of *Olivella* Shell Beads in California. *Journal of California and Great Basin Anthropology.*

Lillard, Jeremiah B., R.F. Heizer, and F. Fenenga
1939 An Introduction to the Archaeology of Central California. Sacramento Junior College, Department of Anthropology, *Bulletin* 2.

Leslie L. Hartzell
Department of Anthropology
University of California
Davis, CA 95616

Glass Trade Beads in the Northeast, and Including Aboriginal Bead Industries.

Gary L. Fogelman. *The Pennsylvania Artifact Series, Booklet* No. 70, Fogelman Publishing Company, Turbotville, Pennsylvania, 1991. i-iv + 44 pp., 29 figs., folded-in color poster. $15.00 (paper).

In 1937, Gerald B. Fenstermaker published an article in *The Pennsylvania Archaeologist*, the newly established Bulletin of the Society for Pennsylvania Archaeology, entitled "Indian Glass Trade Beads." The purpose of this article was to describe the distinctive styles of glass beads found in Lancaster County and to correlate them with the known historic periods, beadmakers and traders. Included in the article was a chart depicting the "Evolution of Indian Beads," as well as drawings of several reconstructed necklaces (Fenstermaker 1937:73-5). While the scholarship on glass beads and their role in the culture of Native Americans has advanced considerably since Fenstermaker's day, the popularity of this approach remains undiminished. Gary Fogelman's glossy booklet is the most recent addition to this literature.

The author's goals are ambitious. In a brief "Intent" section, he outlines four basic purposes for this booklet and its accompanying poster: 1) to familiarize the reader with a complex topic (glass trade beads); 2) to provide a "glimpse" of native beadmaking; 3) to look at how trade goods were assimilated into native culture; and 4) to put both glass trade beads and native-made beads into "a chronological perspective." These are daunting challenges for any bead researcher. Not surprisingly, the results of Fogelman's effort are mixed.

Fogelman divides his text into ten parts. Each ostensibly covers a particular subtopic. Some of these subsections are quite useful; other are, frankly, awful. Let's start with the good news. Fogelman is on firmest ground when discussing glass beads. Part III provides a review of previous classification systems and problems in bead research. Part IV summarizes manufacturing techniques, while Part V discusses bead terminology and includes an interesting compilation of the slang terms used in bead description. Part VI is a reprint of the classification system for glass beads developed by Kenneth and Martha Ann Kidd. Originally published by Parks Canada in 1970, the Kidd system, as amended by Karlis Karklins (1985), has become the standard for describing glass beads in northeastern North America. By making this information more broadly available, Fogelman has performed a valuable service to both collectors and scholars — helping us to speak the same descriptive language. Unfortunately, the Kidds' color plates were not reprinted along with the descriptions.

On the not-so-good side, there are several weak sections. Part I is an ill-fated effort to discuss native beads pre and post European contact. This is a large and complex topic, and Fogelman's choppy, shallow

account of native bead "industries" is just not adequate to the task. Part II, An Overview on Glass Beads in the Northeast, and Part VII, Glass Beads Throughout the Northeast, are largely redundant and, though more substantial, suffer from the same superficial, discursive style that plagues Part I. Superficial is the kindest word for Part VIII, Native Use of Glass Beads.

What differentiates this booklet from other surveys of glass beads is the large (30 x 20 in.) folded-in color poster. Like the booklet, this is an ambitious attempt, one with definite strengths and weaknesses. Essentially, the poster duplicates the information contained in the booklet but with an emphasis on visual rather than textual presentation. Nonetheless, there is a great deal of repetition. Part IX of the booklet is a discussion of the beads used on the poster and includes yet another statement of intent, chronological trends, and most commonly occurring types, all of which is then reprinted on the poster itself. Apparently, this was done so that the poster could be sold on its own, without the accompanying booklet. When used together, however, the impression is of too little information repeated too many times.

The poster's strong point is showing what these beads, both European and native, really look like. In general, the quality of illustration is good. Both a 2-inch and a 5-cm ruler are included for scale. While these suggest that the reproduction was 1 to 1, several beads seem to me to be somewhat larger than actual size. The clarity is pretty good and the printed color values are well matched to those of the beads themselves. The poster gives one an excellent sense of the beads used in north-eastern North America from the 16th through the 18th century. Only seeing actual specimens would be better.

Unfortunately, the poster, like the text, is marred by problems. There are some mistakes. The examples labelled as "whelk shell" and "elk molar" are neither, while the bead identified as drawn variety IIbb3 in the 1600 time-range section is actually a wound specimen (WIIIb) of 19th-century vintage. Many of the chronological placements also seem wrong to me. For example, "Roman" beads (IIj series) as well as the wound "raspberry" beads (WIId series) are, to my knowledge, early 18th-century styles, not mid-17th century. On the other hand, long drawn beads of multi-layered construction, both with (IIIb-IIIbb') and without (IIIa) stripes, are more typical of the mid-17th century than where the poster places them early in the 18th century. There are also many specific chronological assignments that seem questionable. It is unlikely, for example, that beads made from European "Kaolin [sic] pipe stems" date from the late 16th century. Given the effort and cost that undoubtedly went into this poster, it does seem that more care might have been taken to get things right. It is not a good sign when illustrated specimens are followed by the disclaimer "Doesn't belong here."

For all its advantages, the poster approach also has inherent liabilities. Beads are good time markers, but by pigeon holing them into specific time slots, one loses any sense of which varieties were ephemeral and which continued over a long period of time. The poster approach tends to gloss over such distinctions. Another, more serious, distortion is the impression that the chronological distribution of beads illustrated on the poster is spatially valid as well. This is clearly not the case. The bead assemblage that occurs on early 17th-century Iroquois sites in New York state is not the same as that found on Huron sites in Ontario or Algonkian sites in coastal New England. Different native groups received different beads from different European sources at the same time. The poster simply mushes all of them together.

Clearly, this is a publication aimed at collectors rather than scholars. That's fine. It is essential that good information on beads, or any other artifact type, not be locked away in obscure professional publications. In this sense, Fogelman's work provides a needed and useful contribution to the literature on beads. Nonetheless, substantial problems undercut this effort. There are some surprising omissions in the References, even for a popular publication. These include Karklins and Sprague (1980, 1987), as well as other studies that discuss and illustrate (in color) glass beads. Stone (1974) and Deagan (1987) are two examples. Omissions are bound to happen, but they are less forgivable when the author aspires to be "comprehensive, accurate, [and] up to date" (p. ii). The other great annoyance about this booklet is its carelessness. The writing is too chatty and familiar. The illustrations, aside from the poster, are little more than cartoons, and the whole production has a slapdash quality to it. This is not a matter of amateur versus professional work; it is a question of doing the work well.

In sum, this booklet attempts a great deal, but succeeds only occasionally in achieving it. A little time and a lot more attention to detail would have made this useful publication a much more valuable one.

REFERENCES CITED

Deagan, Kathleen
1987 *Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500-1800. Vol. I: Ceramics, Glassware, and Beads.* Smithsonian Institution Press, Washington, D.C.

Fenstermaker, Gerald
1937 Indian Glass Trade Beads. *Pennsylvania Archaeologist* 6(4):72-75.

Karklins, Karlis
1985 Guide to the Description and Classification of Glass Beads. In *Glass Beads*, 2nd ed., pp. 85-118. Parks Canada, Studies in Archaeology, Architecture and History, Ottawa.

Karklins, Karlis and Roderick Sprague
1980 *A Bibliography of Glass Trade Beads in North America.* South Fork Press, Moscow, Idaho.
1987 *A Bibliography of Glass Trade Beads in North America - First Supplement.* Promontory Press, Ottawa, Ontario.

Kidd, Kenneth E. and Martha Ann
1970 A Classification System for Glass Beads for the Use of Field Archaeologists. *Canadian Historic Sites: Occasional Papers in Archaeology and History* 1:45-89.

Stone, Lyle M.
1974 Fort Michilimackinac 1715-1781: An Archaeological Perspective on the Revolutionary Frontier. *Publications of the Museum, Michigan State University, Anthropological Series 2.*

James W. Bradley
R.S. Peabody Museum of Archaeology
Phillips Academy
Andover, MA 01810

Beads from the West African Trade Series.
Volume V, "Russian Blues, Faceted and Fancy Beads from the West African Trade," 1989. 10 pp. of text, 34 pp. of color plates. $15.00 (paper).
Volume VI, "Millefiori Beads from the West African Trade," 1991. 20 pp. of text, 68 pp. of color plates. $25.00 (paper).

John Picard and Ruth Picard. Picard African Imports, 9310 Los Prados, Carmel, California 93923.

These are the two latest volumes in the spectacular series on *Beads from the West African Trade* by the Picards. They are the largest volumes to date and the most informative. There is little question that they present the best color photography in the bead field, showing beads singly or in strands in full size and often enlarged.

Those who have been following this series can only be pleased that it gets better all the time. More information is presented, more details on the beads given, and guest authors (Elizabeth Harris for Volume V, and Jamey Allen for Volume VI) are being invited to provide historical or technical details about the beads.

As impressive as these works are, however, there are a few points which this reviewer believes would make them even more valuable as research tools without sacrificing any of their sumptuous format. In these remarks it is necessary to consider four separate works: the work in the two volumes by the Picards, and the essays by Harris and Allen.

The first point is that there is a responsibility inherent in publishing the names of beads which inevitably become part of the nomenclature. Where there is no historical justification for a name and where it can be misleading, it should be avoided. Though the weak foundations of these names were noted in the text, it would be best to expunge "French Ambassador Bead" and "Lewis and Clark Bead," for example.

This is especially true in the case of "Russian beads." A term apparently coined by Alaskan collectors, it is most confusing to neophytes who naturally assume that the beads were made in Russia. Not only were they not, but there is no evidence for them being brought to Alaska by the Russians. They were not introduced until well after the Russians began getting their stocks of beads from Yankee skippers and the Hudson's Bay Company.

Harris' essay, while quite good on most manufacturing points, loses much of its value by devoting nearly half its length to a short history of Alaska — far from the West African focus of the series — apparently in a vain attempt to justify the name "Russian bead." There were also several historical inaccuracies. Cook did not turn south soon after Nookta Sound, but sailed all the way north through the Bering Strait and explored some of the Alaskan north coast before he was forced to leave. English participation in the trade did not end with the War of 1812; as Harris herself admits, the Hudson's Bay Company was a major participant in the trade — it was an English concern. As for company names, it was the Russian-American Company, not the Russian American Fur Company.

A few things may also be noted in Harris' essay in regard to "Vaseline" beads. Czech tong molds were invented in the early 1700s, not 1800s. While she identified why collectors call these beads "Vaseline," she ought to have mentioned that uranium was discovered in Bohemia, soon tried in glass and was a major ingredient of many Czech beads for a long time. Yes, the beads do fluoresce. There were also several variations re the placement of the mold seam, and the numbers, types and position of the facets.

A second point it that the value of each volume would be enhanced if it were limited to the confines of the title. In the millefiori volume, for example, there are quite a number of beads which are neither millefioris, nor have any mosaic elements on them. I see no justification for the various trail-decorated beads being included (#682 is not trail decorated but of swirled glass, a product of the 1930s).

Additionally, beads not in the West African trade ought not to be included. If the volumes are going to serve as reference points for particular beads in this trade, the inclusion of other types of beads or beads from other sources is confusing. The Picards do give us this information, but many casual and even some studious readers will not plow through their long and complex captions to find this out.

Concerning the ancient beads from West Africa decorated with mosaic chips, the Picards are rightly skeptical of Dubin's ascription to Roman or Ptolemaic times, but have made a serious error in tentatively ascribing them to "middle-to-late Islamic dating from 300 to 600 AD" (p. 8). The Islamic period did not commence until the Hegira in A.D. 622. These beads are Early Islamic from the time the trans-Saharan trade was opened about the 9th century until the destruction of the major Middle Eastern glass beadmaking centers in the 12th and 13th centuries.

Allen's essay on manufacturing mosaic elements is generally good but for two points. I hope no one attempts to follow his instructions of "joining together cold preformed units with a hot and molten quantity of glass" (p. 6) or they will be in for a nasty surprise. When glass is fused to glass both pieces must be hot (not molten or liquid, but semi-viscous). This includes the placing of *murrine* (slices of mosaic canes) onto the core of millefiori beads.

There is also an important third way to make mosaic elements, a technique I have called the "hot strip method." It consists of laying strips of hot glass upon a gather of hot glass, color by color, building up a pattern. This is how Indian millefiories are made, and is the most likely method used to make most mosaic elements in ancient times.

Finally, the value of this series would be much enhanced if the beads were placed in some sort of logical order. Simply putting them on pages helter-skelter gives us the beads, but much more information would be conveyed if there were some sort of meaningful sequence. For example, the Picards are in an excellent position to record the people and places where particular beads are used. West Africa is a huge geographical area, and it is well known that some people and/or nations favor certain beads over others, or at least were the recipients of them. One can distinguish some communities by their beads. If beads used by one group of people were put together and so labeled (exceptions being noted as well), this would add to the utility and contribution of the series.

In the millefiori volume, there was a very important chance to significantly add to our understanding of these beads by ordering them

logically. Pages 70 through 87 are beads found on the cards of the J.F. Sick & Co. in the Royal Tropical Institute of Amsterdam. The Picards have been studying these sample cards for some time and have advanced what appears to be a correct interpretation of their chronological order. Why were the beads not shown in this order? It they had been, would any meaningful pattern have arisen from this simple and rational arrangement? The answer is an emphatic Yes! On the pages indicated are 350 millefiori/mosaic beads dating from before World War I, and 298 from the period 1920 to 1931. Of the 350 pre-World War I beads, no less than 88.9% have composite (I much prefer the term "bundled" because of the many meanings of "composite") *murrine*, made by bundling together monochrome glass canes to build up the design; only 6.6% have molded ones at this time. After the war, only 9.7% of the beads have composite (bundled) designs, while 68.1% are molded and 22.1% are cased (layered). Moreover, two thirds of the later composite/bundled chips are on beads made from 1920 to 1925, and six of the remaining ten are used very sparingly on beads in 1927, with none used after 1929.

Assuming the dating is correct, and there seems no reason not to, and keeping in mind the hazards of using sample cards (though these are from a well-dated and carefully curated set), this means that the composite/bundled mosaic chips on millefioris are virtually all from the early decades of this century, while molded ones do not come into their own until after the Great War.

This strikes me as very important. The dating of beads is a crucial fact about them. The figures are so overwhelmingly lopsided that unless a serious attempt were made to skew the data presented in this book (and there is no reason to think that this was done), the pattern is quite clear. This, then, solves the mystery which has existed for many years as to why there is a difference between these two methods for making mosaic canes: the difference is chronological.

Are there other chronological differences between these beads? For one, there is a clear ascendancy of simple cased *murrine* over time: only one is recorded before World War I, 15 in the next six years, and then 50 in the last six years. What about added stripes, the laying of canes lengthwise, and so on? There may also be patterns here, but the hodgepodge method of arranging the beads has prevented me from pursuing them.

The point is this: the Picard's volumes, in particular the one on millefiori beads, contain a great deal of data, enough apparently to clear up what has long been a major problem in the understanding of these beads. But this ought to be the task of the authors to elucidate, not a reviewer, who spent nearly a day flipping back and forth through the unorganized presentation. Had the beads been put in simple chronological order, this distinction and any other possible ones would have jumped off the page and been immediately clear to everyone.

In sum, these are wonderful books and are recommended to anyone with a serious interest in beads or to those who just like to look at them. There is room for improvement, but the improvements that have already been made in the series lend strength to the belief that we will see future volumes being even more valuable than those published thus far.

Peter Francis, Jr.
Center for Bead Research
4 Essex Street
Lake Placid, NY 12946

Glass in Jewelry: Hidden Artistry in Glass.
Sibylle Jargstorf. Schiffer Publishing Ltd., West Chester, Pennsylvania, 1991. 176 pp., 284 color figs., 35 b&w figs., index. $29.95/ £24.95 (paper).

The book list of Schiffer Publishing comprises a wide range of subjects, almost all on "collectibles" and, as such, they are well illustrated and include value guides. They are aimed at the intelligent collector, rather than the academic reader. This book, written by a trained chemist from Braunschweig, Germany, is more scholarly than many books published by Schiffer, although, from the student's viewpoint, it is marred by the nearly total lack of sources for the archival illustrations used and the lack

of reference citations, apart from a few footnotes in tiny print. There is hardly any indication of the ownership of the illustrated pieces, which include beads and beadwork in variety, as well as brooches and miniature mosaic jewerly. The references are mostly in German and it seems likely that the original manuscript was in that language, though no translator's credit is given.

This book's scope is obviously not confined to beads, although a very high proportion of the illustrations and subject matter deals with them. Nothing is presented on the jewelry or beads of India or China; the focus is on jewelry made in Venice (Murano) and central Europe. There is some allusion to glass beads made in antiquity, or to some of the more noteworthy beads made for the overseas trade, such as white hearts, chevrons and millefioris.

The illustrations, mostly in color, often four to a page, are outstandingly good, and alone make the book worth the high price in sterling. There are a few cases where the color register is suspect, as on p. 15 where a beaded notebook cover and a detail of the same are in different shades, while the historical black-and-white photographs of German women wearing jewelry or beaded dress ornament are mostly too dark to serve any useful purpose (that on p. 154 is perhaps the worst). Some duplication occurs; e.g., on pages 22 and 44, and 24 and 49. The absence of a scale in the photographs is a pity, though it is usually possible to infer that the subject is shown actual size, or double that. Detailed closeups of cut-glass, molded or faceted beads, some with 96 or 117 facets, and photographs showing the different varieties of glass used (bicolored, satin, uranium, filigree, aventurine and iridescent, to name just a few) make the book a joy to leaf through. The use of complementary mounts or backgrounds adds to the visual pleasure.

Bead colors are covered in a short note on the seed beads produced in great quantity for knitwork and embroidery in the early 19th century. By the 1830s the beadmakers of Murano claimed to make 150 different shades, including five basic whites: alabaster, chalk, milk, opal and porcelain, in sizes from one to nine millimeters. Bohemia also developed a wide range of colors. One manufacturer exhibited 105 different colors in 1873, while a group of glass recipes from 1892 included 21 varieties of yellow which, to judge from the ingredients, must really have differed. One wonders how the Munsell color charts would have coped.

"Bohemian" glassworking is given detailed coverage. Two maps on pp. 37-38, and Chapter 5, sub-headed "Bead- and Gem-making in Bavaria/Thuringia/Bohemia/Silesia," together with many other references throughout the text, give a good picture of beadmaking in central Europe, naming some of the glassmakers and their products, and describing the exploitation of the many cottage workers. Peter Francis, Jr's. *Czech Bead Story* (1979) and his densely written later account in *The Glass Trade Beads of Europe* (1988) are still the best review of this area of bead production, but the present book does illustrate gems and beads made for the European and American fashion market up to the late 1950s, and shows the work of some of the fashion designers.

Sybille Jargstorf's training as a chemist means that there are useful and welcome technical explanations of the glass or beadmaking processes, such as opaline/alabaster glass (p. 14), white-heart beads (p. 29), aventurine or goldstone glass (Chapter 11), and the making of false pearls and coral or gold hollow-glass beads (pp. 135-6). Full attention is given to beadmaking equipment in the longest chapter (Chapter 6, "How the Beads are Made") which is illustrated with line engravings of lampworking devices, pressing tools and a faceting machine (but frustratingly, the lettered parts are not explained in the captions, and no sources are given for the drawings). Photographs of bundles of drawn tubes and canes, lampworking in the E. Moretti workshops on Murano and in the Schuhmeyer workshop in Neu-Gablonz, details of blown beads, satin-glass beads, pressed, faceted, iridescent and fancy beads in variety complement the text with its explanations of how certain effects were achieved. There is one word, "protoberas," which may be a geological term, that occurs on page 37. The material is clearly a substance of volcanic origin used in the making of black beads in the Fichtel mountains of Bavaria. It is not defined in the *Oxford Dictionary* or *Encyclopedia Britannica*, and I would have liked more information on it since there is quite a range of volcanic substances that might have been used to make black glass.

Chapter 9, "Millefiori Jewelry," sketches in the antiquity of this aspect of glassworking which goes back to the first century B.C. (though, surprisingly,

there is no reference to Anglo-Saxon millefiori), and reviews the work of the little-known German Dr. Fuss in 1833, and of Domenico Bussolin in 1836 (his factory opened in 1838) in rediscovering the lost art of mosaic glassmaking. The theory seems to have been worked out by Count Caylus (in 1752) and put into practice in 1766 by Reiffenstein, whose analysis of an antique portrait cane is quoted. Illustrations include 19th-century and modern millefiori beads, a drawing of antique beads (probably from Alexandria) including mosaic and portrait canes, and a portrait cane of Garibaldi.

The chapter on "Aventurine Jewelry" illustrates beads, brooches and bracelets featuring this beautiful glass, first recorded in 1644, and named from *aventura*: risk or chance, from the uncertainty that the mixture would come out correctly. The chemistry of copper and its behavior as an element in the making of differently colored glasses is explained, with the wry observation that the practical experience of Muranese glassmakers was superior to that of German chemists and glass manufacturers.

The chapters on "Once Fashionable Jewelry" and "Modern Designs in Glass Jewelry" provide valuable documentation for what one might term recent, as well as tomorrow's antiques. The pieces illustrated are almost entirely from Silesia or Germany; Lalique and Tiffany get only a brief reference, and the Dior necklace on p. 172 originated in Neu-Gablonz. One's pleasure in browsing over the jewelry stalls at bazaars and antique fairs is enhanced by knowing rather more about recent glass-bead jewelry than before.

Margret Carey
Museum of Mankind
6 Burlington Gardens
London W1X 2EX
United Kingdom